# North Carolina Board of Transportation Environmental Planning and Policy Committee Meeting Minutes for June 4, 2003

A meeting of the Environmental Planning and Policy Committee (EPPC) was held on Wednesday, June 4, 2003 at 8:00 a.m. in the Board Room (Room 150) of the Transportation Building located at 1 South Wilmington Street in Raleigh. Nina Szlosberg chaired the meeting. Board of Transportation members that attended were:

Conrad Burrell Doug Gaylon
Tom Betts Frank Johnson
Marion Cowell Nina Szlosberg

### Other attendees included:

Christie Barbee Ehren Meister Adrian Blackwell Mike Mills Craig Deal Jon Nance James Rand Lisa Glover Gail Grimes Bill Ross Rob Hanson Allen Pope Phil Harris Roy Shelton M.L. Holder Ted Sherrod Julie Hunkins John Sullivan Pay Ivey Jay Swain Berry Jenkins Greg Thorpe

Neil Lassiter Charles Tomlinson

Sharon Lipscomb Don Voelker Odessa McGlown Marcus Wilner

## 1. Call to Order, Introductions, and Approval of Meeting Minutes

The minutes of the last meeting were approved as presented.

Before proceeding with the planned agenda, Ms. Szlosberg recognized many of the special guests in attendance, including Mr. Joel Setzer, Division Maintenance Engineer from Division 14.

Ms. Szlosberg proceeded to discuss the Southern Environmental Leadership Summit, which was sponsored by the NC Department of Transportation and the Federal Highway Administration, and held from May 19-21, 2003 in Raleigh. She acknowledged the success achieved in attendance as 300 participants were expected, and 406 persons actually attended from all over the southern United States and Puerto Rico. Ms. Szlosberg felt that the conference provided a valuable opportunity for all to share their experiences and mentioned the many favorable comments that participants made on the

evaluation sheets. She also acknowledged Governor Easley's opening remarks in which he reiterated the importance of joint collaboration between those stakeholders in the environmental and transportation disciplines. He encouraged everyone involved to work together to accomplish the state's goals in a way that respects both our transportation needs and our environment.

Ms. Szlosberg stated that although it would be difficult to recognize everyone who played a part in the success of the conference, she sincerely appreciates all the effort that each person contributed. Ms. Szlosberg acknowledged the role of the Conference Planning Committee and asked DOT Deputy Secretary Roger Sheats to comment on the Planning Committee's work. Mr. Sheats recalled an evening in which the members worked through the night to ensure the data presented in a workshop on the previous day was properly processed for presentation on the following day. Understanding the tremendous physical and mental effort demanded of the committee, he acknowledged their commitment and thanked them for their diligence and perseverance.

The following Conference Planning Committee members were presented the Extra Mile Award:

Sandy Nance Highway Administrator's Office
Burt Tasaico Information Technology Section
Rhett Fussell Statewide Planning Branch
Julie Hunkins Office of Environmental Quality

Marcus Wilner FHWA

Katie Snipes FHWA (not present)

Ms. Szlosberg also recognized and welcomed Mr. John Sullivan, who was recently appointed as the Division Administrator for the Federal Highway Administration in North Carolina.

## 2. Low Impact Design Guidance Information

The next order of business was "Low Impact Design Guidance Information" presented by Janet D'Ignazio, Chief Officer, Office of Planning and the Environment. Ms. D'Ignazio provided information and follow-up on the Smart Growth information she presented a couple of months ago. She informed the group that her office has received many calls from cities, counties, and NC Division of Community Assistance in which they are requesting consideration to include low impact design standards that will help with the advancement of conservation developments. Conservation developments would be used in a residential development (subdivision) when water quality issues, including high quality watershed areas, protected waters, etc., would cause one to consider impacts of expansion.

Current subdivision road standards require the developer to request a variance if a conservation development is desired, or the road must remain private. A low-impact design standard does not sacrifice the things that we care about as transportation

professionals. Generally, what the transportation professional would experience is a narrower footprint for the road, changes to the drainage patterns to minimize the impervious surface, or controlling storm water run-off in such a way that it will recharge the aquifer and get back into the system as quickly as possible.

Low-impact design standards are generally used in small residential developments of approximately fifty units, with low volume roads. In a residential area, roads make up a considerable percentage of the impervious surface; by reducing the width of the street, the amount of impervious surface could be reduced between five to twenty percent. Low-impact design does not sacrifice pedestrian safety or the safety of vehicular traffic, nor does it limit general or emergency access to, or mobility within the subdivision. Low-impact design simply looks at ways to make the road "fit better" into a sensitive environment.

A group, chaired by Jim Rand from Operations, has been formed to take a look at the theory behind conservation developments, low-impact design standards, and how they fit into the Department's mission in order to develop subdivision standards that can be used automatically without going through the variance process. Jim Rand will be supported by members throughout the Department, including Statewide Planning, Roadside Environmental, and Traffic Engineering as needed. The committee will conduct the research and report their findings back to the Environmental Policy and Planning Committee.

Boards Member Tom Betts asked how long will this process take? Ms. D'Ignazio replied that the actual amount of time to complete the process would be minimal. The prevailing issue is balancing current staff loads and priorities, while conducting thorough research in order to develop recommendations. The committee will need enough time to complete its work thoughtfully without impacting current priorities, but will keep the Committee abreast as their work progresses.

Ms Szlosberg asked how will conservation development overlap with our traditional neighborhood design? Subdivision standards and conservation developments are two different things. A conservation development is considered when there is a very environmentally sensitive area where one would strive to reduce rather than increase density. Although the potential of overlap does exist, there is a difference between the two.

Ms. Szlosberg asked Christie Barbee of Carolina Asphalt Paving Association to present information on impervious surfaces and porous concrete. Ms. Barbee stated that she and Berry Jenkins had been invited to Senator Basnight's office earlier this year to talk about legislation that would require a percentage of the new parking lots being constructed to be made of a pervious surface. Although there may appear to be very little interest now, current national trends in the industry suggest that the interest level may increase. Similar to permeable concrete, porous asphalt is being used nationally. In fact, there are a couple of projects in Chapel Hill recently, specifically at the Friday Center, where porous asphalt is being used. The engineering principle is very similar to what is being

used now in that there is a specified depth of aggregate (dependent on the type of subsurface material used) beneath a permeable asphalt that allows the water to seep through and be held in the rock until it can be absorbed by the ground. This is not new technology —what is new is the additional interest in it and the realization that we have permeable pavements that are still working quite well. The important factor is keeping the surface clean. Once every six to twelve months, depending on the type and amount of traffic, the surface must be cleaned with an industrial vacuum.

Ms. Barbee addressed a question from Mr. Betts on how permeable pavement responds to freezing water? The water would not freeze on the top or within the material. The water would actually seep through the porous material and freeze in the stone below. She stated the other benefits of this material, which are the lower cost when compared to concrete and the fact that it can be designed for any weight load that would be needed.

Janet D'Ignazio completed her presentation by stating that the use of porous material is not new technology for DOT as porous pavers have been used in a parking lot application for DMV. Porous materials also are used in low-impact designs, usually in drainage applications.

Ms. Szlosberg stated that she would like to see a commitment that when rest areas, etc. are being constructed that we would think about using these technologies as model projects. She requested that if Jim Rand's group agrees with the proposal, they could blend the recommendation into their work and present a proposal for the EPPC to consider.

### 3. Comments and Wrap-up

Mr. Conrad Burwell invited everyone to visit the 4,400-acre tract of land in western North Carolina that has been purchased as a joint partnership between NCDOT, the Nature Conservancy, and others. Some of this land will be used for mitigation on Appalachian Corridor K, a substantial road project in western North Carolina. Ms. Szlosberg reminded the Committee members that they would vote on that acquisition in the full DOT Board meeting the following day.

The meeting adjourned at 8:50 a.m.